

Marc T M Koper

List of Publications by Year in descending order

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436
papers

49,609
citations

872

117
h-index

2033

205
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462
all docs

462
docs citations

462
times ranked

24945
citing authors

#	ARTICLE	IF	CITATIONS
1	Catalysts and Reaction Pathways for the Electrochemical Reduction of Carbon Dioxide. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 4073-4082.	4.6	1,524
2	Advances and challenges in understanding the electrocatalytic conversion of carbon dioxide to fuels. <i>Nature Energy</i> , 2019, 4, 732-745.	39.5	1,506
3	Activating lattice oxygen redox reactions in metal oxides to catalyse oxygen evolution. <i>Nature Chemistry</i> , 2017, 9, 457-465.	13.6	1,409
4	Challenges in reduction of dinitrogen by proton and electron transfer. <i>Chemical Society Reviews</i> , 2014, 43, 5183-5191.	38.1	1,234
5	Nitrogen Cycle Electrocatalysis. <i>Chemical Reviews</i> , 2009, 109, 2209-2244.	47.7	1,124
6	Thermodynamic theory of multi-electron transfer reactions: Implications for electrocatalysis. <i>Journal of Electroanalytical Chemistry</i> , 2011, 660, 254-260.	3.8	908
7	Interfacial water reorganization as a pH-dependent descriptor of the hydrogen evolution rate on platinum electrodes. <i>Nature Energy</i> , 2017, 2, .	39.5	791
8	A new mechanism for the selectivity to C1 and C2 species in the electrochemical reduction of carbon dioxide on copper electrodes. <i>Chemical Science</i> , 2011, 2, 1902.	7.4	764
9	Two Pathways for the Formation of Ethylene in CO Reduction on Single-Crystal Copper Electrodes. <i>Journal of the American Chemical Society</i> , 2012, 134, 9864-9867.	13.7	704
10	Theoretical Considerations on the Electroreduction of CO to C ₂ Species on Cu(100) Electrodes. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 7282-7285.	13.8	677
11	Introducing structural sensitivity into adsorption energy scaling relations by means of coordination numbers. <i>Nature Chemistry</i> , 2015, 7, 403-410.	13.6	600
12	Theory of multiple proton-electron transfer reactions and its implications for electrocatalysis. <i>Chemical Science</i> , 2013, 4, 2710.	7.4	581
13	The stability number as a metric for electrocatalyst stability benchmarking. <i>Nature Catalysis</i> , 2018, 1, 508-515.	34.4	533
14	Electrocatalytic reduction of nitrate at low concentration on coinage and transition-metal electrodes in acid solutions. <i>Journal of Electroanalytical Chemistry</i> , 2003, 554-555, 15-23.	3.8	506
15	Electrocatalytic Nitrate Reduction for Sustainable Ammonia Production. <i>Joule</i> , 2021, 5, 290-294.	24.0	497
16	The importance of nickel oxyhydroxide deprotonation on its activity towards electrochemical water oxidation. <i>Chemical Science</i> , 2016, 7, 2639-2645.	7.4	494
17	Guidelines for the Rational Design of Ni-Based Double Hydroxide Electrocatalysts for the Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2015, 5, 5380-5387.	11.2	472
18	Reactivity Descriptors for the Activity of Molecular MN ₄ Catalysts for the Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 14510-14521.	13.8	463

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19	In Situ Observation of Active Oxygen Species in Fe-Containing Ni-Based Oxygen Evolution Catalysts: The Effect of pH on Electrochemical Activity. <i>Journal of the American Chemical Society</i> , 2015, 137, 15112-15121.	13.7	459
20	Electrochemical CO ₂ reduction on Cu ₂ O-derived copper nanoparticles: controlling the catalytic selectivity of hydrocarbons. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 12194-12201.	2.8	458
21	Electrocatalytic reduction of carbon dioxide to carbon monoxide and methane at an immobilized cobalt protoporphyrin. <i>Nature Communications</i> , 2015, 6, 8177.	12.8	456
22	Powering denitrification: the perspectives of electrocatalytic nitrate reduction. <i>Energy and Environmental Science</i> , 2012, 5, 9726.	30.8	436
23	Structure sensitivity and nanoscale effects in electrocatalysis. <i>Nanoscale</i> , 2011, 3, 2054.	5.6	402
24	The role of adsorbed hydroxide in hydrogen evolution reaction kinetics on modified platinum. <i>Nature Energy</i> , 2020, 5, 891-899.	39.5	400
25	Electrochemical CO ₂ Reduction to Formic Acid at Low Overpotential and with High Faradaic Efficiency on Carbon-Supported Bimetallic Pd-Pt Nanoparticles. <i>ACS Catalysis</i> , 2015, 5, 3916-3923.	11.2	394
26	Absence of CO ₂ electroreduction on copper, gold and silver electrodes without metal cations in solution. <i>Nature Catalysis</i> , 2021, 4, 654-662.	34.4	386
27	Role of Crystalline Defects in Electrocatalysis: Mechanism and Kinetics of CO Adlayer Oxidation on Stepped Platinum Electrodes. <i>Journal of Physical Chemistry B</i> , 2002, 106, 12938-12947.	2.6	371
28	Spectroscopic Observation of a Hydrogenated CO Dimer Intermediate During CO Reduction on Cu(100) Electrodes. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 3621-3624.	13.8	366
29	Electrocatalytic Oxidation of Alcohols on Gold in Alkaline Media: Base or Gold Catalysis?. <i>Journal of the American Chemical Society</i> , 2011, 133, 6914-6917.	13.7	363
30	Manipulating the Hydrocarbon Selectivity of Copper Nanoparticles in CO ₂ Electroreduction by Process Conditions. <i>ChemElectroChem</i> , 2015, 2, 354-358.	3.4	361
31	Iridium-based double perovskites for efficient water oxidation in acid media. <i>Nature Communications</i> , 2016, 7, 12363.	12.8	353
32	Electrochemistry of Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 3558-3586.	13.8	333
33	The role of adsorbates in the electrochemical oxidation of ammonia on noble and transition metal electrodes. <i>Journal of Electroanalytical Chemistry</i> , 2001, 506, 127-137.	3.8	323
34	The influence of pH on the reduction of CO and CO_2 to hydrocarbons on copper electrodes. <i>Journal of Electroanalytical Chemistry</i> , 2014, 716, 53-57.	3.8	319
35	Competition between CO ₂ Reduction and Hydrogen Evolution on a Gold Electrode under Well-Defined Mass Transport Conditions. <i>Journal of the American Chemical Society</i> , 2020, 142, 4154-4161.	13.7	315
36	Three-dimensional porous hollow fibre copper electrodes for efficient and high-rate electrochemical carbon dioxide reduction. <i>Nature Communications</i> , 2016, 7, 10748.	12.8	294

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37	Structure- and Potential-Dependent Cation Effects on CO Reduction at Copper Single-Crystal Electrodes. <i>Journal of the American Chemical Society</i> , 2017, 139, 16412-16419.	13.7	289
38	Structure Sensitivity of the Electrochemical Reduction of Carbon Monoxide on Copper Single Crystals. <i>ACS Catalysis</i> , 2013, 3, 1292-1295.	11.2	282
39	Competition between Hydrogen Evolution and Carbon Dioxide Reduction on Copper Electrodes in Mildly Acidic Media. <i>Langmuir</i> , 2017, 33, 9307-9313.	3.5	277
40	Periodic Density Functional Study of CO and OH Adsorption on Pt ¹¹¹ Ru Alloy Surfaces: Implications for CO Tolerant Fuel Cell Catalysts. <i>Journal of Physical Chemistry B</i> , 2002, 106, 686-692.	2.6	275
41	Number of outer electrons as descriptor for adsorption processes on transition metals and their oxides. <i>Chemical Science</i> , 2013, 4, 1245.	7.4	273
42	Highly Selective Electro-Oxidation of Glycerol to Dihydroxyacetone on Platinum in the Presence of Bismuth. <i>ACS Catalysis</i> , 2012, 2, 759-764.	11.2	259
43	Cooxidation on stepped Pt[n(111) $\bar{1}$ (111)] electrodes. <i>Journal of Electroanalytical Chemistry</i> , 2000, 487, 37-44.	3.8	258
44	Electrocatalytic reduction of Nitrate on Copper single crystals in acidic and alkaline solutions. <i>Electrochimica Acta</i> , 2017, 227, 77-84.	5.2	258
45	Structure Sensitivity of Methanol Electrooxidation Pathways on Platinum: An On-Line Electrochemical Mass Spectrometry Study. <i>Journal of Physical Chemistry B</i> , 2006, 110, 10021-10031.	2.6	252
46	Orientation-Dependent Oxygen Evolution on RuO ₂ without Lattice Exchange. <i>ACS Energy Letters</i> , 2017, 2, 876-881.	17.4	251
47	Mechanism of the Catalytic Oxidation of Glycerol on Polycrystalline Gold and Platinum Electrodes. <i>ChemCatChem</i> , 2011, 3, 1176-1185.	3.7	246
48	MnO _x /IrO _x as Selective Oxygen Evolution Electrocatalyst in Acidic Chloride Solution. <i>Journal of the American Chemical Society</i> , 2018, 140, 10270-10281.	13.7	245
49	The promoting effect of adsorbed carbon monoxide on the oxidation of alcohols on a gold catalyst. <i>Nature Chemistry</i> , 2012, 4, 177-182.	13.6	237
50	Physical and Chemical Nature of the Scaling Relations between Adsorption Energies of Atoms on Metal Surfaces. <i>Physical Review Letters</i> , 2012, 108, 116103.	7.8	233
51	Electrochemical water splitting by gold: evidence for an oxide decomposition mechanism. <i>Chemical Science</i> , 2013, 4, 2334.	7.4	229
52	Effects of electrolyte pH and composition on the ethanol electro-oxidation reaction. <i>Catalysis Today</i> , 2010, 154, 92-104.	4.4	228
53	Electrocatalytic Conversion of Furanic Compounds. <i>ACS Catalysis</i> , 2016, 6, 6704-6717.	11.2	226
54	Role of Crystalline Defects in Electrocatalysis: CO Adsorption and Oxidation on Stepped Platinum Electrodes As Studied by in situ Infrared Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2002, 106, 9863-9872.	2.6	221

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55	Co ²⁺ Adsorption of Cations as the Cause of the Apparent pH Dependence of Hydrogen Adsorption on a Stepped Platinum Single-Crystal Electrode. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 15025-15029.	13.8	221
56	Importance of Acid-Base Equilibrium in Electrocatalytic Oxidation of Formic Acid on Platinum. <i>Journal of the American Chemical Society</i> , 2013, 135, 9991-9994.	13.7	214
57	The influence of nitrate concentration and acidity on the electrocatalytic reduction of nitrate on platinum. <i>Journal of Electroanalytical Chemistry</i> , 2004, 562, 81-94.	3.8	209
58	A basic solution. <i>Nature Chemistry</i> , 2013, 5, 255-256.	13.6	205
59	Tailoring the catalytic activity of electrodes with monolayer amounts of foreign metals. <i>Chemical Society Reviews</i> , 2013, 42, 5210.	38.1	202
60	Water dissociation on well-defined platinum surfaces: The electrochemical perspective. <i>Catalysis Today</i> , 2013, 202, 105-113.	4.4	201
61	Quantum-chemical calculations of CO and OH interacting with bimetallic surfaces. <i>Electrochimica Acta</i> , 2002, 47, 3621-3628.	5.2	197
62	Analysis of electrocatalytic reaction schemes: distinction between rate-determining and potential-determining steps. <i>Journal of Solid State Electrochemistry</i> , 2013, 17, 339-344.	2.5	195
63	In Situ Spectroscopic Study of CO ₂ Electroreduction at Copper Electrodes in Acetonitrile. <i>ACS Catalysis</i> , 2016, 6, 2382-2392.	11.2	194
64	Monte Carlo simulations of a simple model for the electrocatalytic CO oxidation on platinum. <i>Journal of Chemical Physics</i> , 1998, 109, 6051-6062.	3.0	189
65	Why Is Bulk Thermochemistry a Good Descriptor for the Electrocatalytic Activity of Transition Metal Oxides?. <i>ACS Catalysis</i> , 2015, 5, 869-873.	11.2	189
66	Ethanol electro-oxidation on platinum in alkaline media. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 10446.	2.8	186
67	Water at charged interfaces. <i>Nature Reviews Chemistry</i> , 2021, 5, 466-485.	30.2	186
68	Enhancement of Oxygen Evolution Activity of Nickel Oxyhydroxide by Electrolyte Alkali Cations. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 12999-13003.	13.8	182
69	First-principles computational electrochemistry: Achievements and challenges. <i>Electrochimica Acta</i> , 2012, 84, 3-11.	5.2	180
70	On the importance of correcting for the uncompensated Ohmic resistance in model experiments of the Oxygen Reduction Reaction. <i>Journal of Electroanalytical Chemistry</i> , 2010, 647, 29-34.	3.8	177
71	Mechanistic classification of electrochemical oscillators – an operational experimental strategy. <i>Journal of Electroanalytical Chemistry</i> , 1999, 478, 50-66.	3.8	176
72	Mechanism and kinetics of the electrochemical CO adlayer oxidation on Pt(111). <i>Journal of Electroanalytical Chemistry</i> , 2002, 524-525, 242-251.	3.8	176

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73	Intermediate stages of electrochemical oxidation of single-crystalline platinum revealed by in situ Raman spectroscopy. <i>Nature Communications</i> , 2016, 7, 12440.	12.8	175
74	A spongy nickel-organic CO ₂ reduction photocatalyst for nearly 100% selective CO production. <i>Science Advances</i> , 2017, 3, e1700921.	10.3	175
75	Mechanism of the Dissociation and Electrooxidation of Ethanol and Acetaldehyde on Platinum As Studied by SERS. <i>Journal of Physical Chemistry C</i> , 2008, 112, 19080-19087.	3.1	170
76	Combining Voltammetry with HPLC: Application to Electro-Oxidation of Glycerol. <i>Analytical Chemistry</i> , 2010, 82, 5420-5424.	6.5	170
77	Efficiency and selectivity of CO ₂ reduction to CO on gold gas diffusion electrodes in acidic media. <i>Nature Communications</i> , 2021, 12, 4943.	12.8	170
78	Ab Initio Calculations of Intermediates of Oxygen Reduction on Low-Index Platinum Surfaces. <i>Journal of the Electrochemical Society</i> , 2004, 151, A2016.	2.9	169
79	Controlling Catalytic Selectivities during CO ₂ Electroreduction on Thin Cu Metal Overlayers. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 2410-2413.	4.6	168
80	Bond-Making and Breaking between Carbon, Nitrogen, and Oxygen in Electrocatalysis. <i>Journal of the American Chemical Society</i> , 2014, 136, 15694-15701.	13.7	168
81	Field-dependent chemisorption of carbon monoxide and nitric oxide on platinum-group (111) surfaces: Quantum chemical calculations compared with infrared spectroscopy at electrochemical and vacuum-based interfaces. <i>Journal of Chemical Physics</i> , 2000, 113, 4392-4407.	3.0	167
82	DFT Study on the Mechanism of the Electrochemical Reduction of CO ₂ Catalyzed by Cobalt Porphyrins. <i>Journal of Physical Chemistry C</i> , 2016, 120, 15714-15721.	3.1	167
83	Landing and Catalytic Characterization of Individual Nanoparticles on Electrode Surfaces. <i>Journal of the American Chemical Society</i> , 2012, 134, 18558-18561.	13.7	160
84	On-line mass spectrometry system for measurements at single-crystal electrodes in hanging meniscus configuration. <i>Journal of Applied Electrochemistry</i> , 2006, 36, 1215-1221.	2.9	159
85	Electro-oxidation of ethanol and acetaldehyde on platinum single-crystal electrodes. <i>Faraday Discussions</i> , 2008, 140, 399-416.	3.2	159
86	Proton-coupled electron transfer in the electrocatalysis of CO ₂ reduction: prediction of sequential vs. concerted pathways using DFT. <i>Chemical Science</i> , 2017, 8, 458-465.	7.4	159
87	Suppression of Hydrogen Evolution in Acidic Electrolytes by Electrochemical CO ₂ Reduction. <i>Journal of the American Chemical Society</i> , 2021, 143, 279-285.	13.7	158
88	Interaction of H, O and OH with metal surfaces. <i>Journal of Electroanalytical Chemistry</i> , 1999, 472, 126-136.	3.8	157
89	Mechanisms of Carbon Monoxide and Methanol Oxidation at Single-crystal Electrodes. <i>Topics in Catalysis</i> , 2007, 46, 320-333.	2.8	157
90	Strong Impact of Platinum Surface Structure on Primary and Secondary Alcohol Oxidation during Electro-Oxidation of Glycerol. <i>ACS Catalysis</i> , 2016, 6, 4491-4500.	11.2	156

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91	Lattice Gas Model for CO Electrooxidation on Pt ¹¹¹ /Ru Bimetallic Surfaces. <i>Journal of Physical Chemistry B</i> , 1999, 103, 5522-5529.	2.6	152
92	Nitrate reduction on single-crystal platinum electrodes. <i>Electrochimica Acta</i> , 2005, 50, 4318-4326.	5.2	152
93	Mechanisms of electrochemical reduction and oxidation of nitric oxide. <i>Electrochimica Acta</i> , 2004, 49, 1307-1314.	5.2	151
94	Mechanistic Study on the Electrocatalytic Reduction of Nitric Oxide on Transition-Metal Electrodes. <i>Journal of Catalysis</i> , 2001, 202, 387-394.	6.2	148
95	Electrocatalytic oxidation of hydrazine on platinum electrodes in alkaline solutions. <i>Electrochimica Acta</i> , 2008, 53, 5199-5205.	5.2	148
96	Stripping voltammetry of carbon monoxide oxidation on stepped platinum single-crystal electrodes in alkaline solution. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 3802.	2.8	148
97	Electrocatalysis on gold. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 13583-13594.	2.8	143
98	Cathodic Corrosion: A Quick, Clean, and Versatile Method for the Synthesis of Metallic Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 6346-6350.	13.8	142
99	Non-linear phenomena in electrochemical systems. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1998, 94, 1369-1378.	1.7	139
100	Electrochemical CO ₂ reduction to formic acid on a Pd-based formic acid oxidation catalyst. <i>Catalysis Today</i> , 2015, 244, 58-62.	4.4	138
101	Electrocatalytic oxidation of ammonia on Pt(111) and Pt(100) surfaces. <i>Physical Chemistry Chemical Physics</i> , 2006, 8, 2513.	2.8	137
102	The Interrelated Effect of Cations and Electrolyte pH on the Hydrogen Evolution Reaction on Gold Electrodes in Alkaline Media. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 13452-13462.	13.8	137
103	The Importance of Cannizzaro-Type Reactions during Electrocatalytic Reduction of Carbon Dioxide. <i>Journal of the American Chemical Society</i> , 2017, 139, 2030-2034.	13.7	133
104	Structural and electronic effects in heterogeneous electrocatalysis: Toward a rational design of electrocatalysts. <i>Journal of Catalysis</i> , 2013, 308, 11-24.	6.2	132
105	Structure-sensitive electroreduction of acetaldehyde to ethanol on copper and its mechanistic implications for CO and CO ₂ reduction. <i>Catalysis Today</i> , 2016, 262, 90-94.	4.4	132
106	Measurement of competition between oxygen evolution and chlorine evolution using rotating ring-disk electrode voltammetry. <i>Journal of Electroanalytical Chemistry</i> , 2018, 819, 260-268.	3.8	131
107	Methanol Oxidation on Stepped Pt[n(111) \bar{A} – (110)] Electrodes: A Chronoamperometric Study. <i>Journal of Physical Chemistry B</i> , 2003, 107, 8557-8567.	2.6	129
108	The Role of Cation Acidity on the Competition between Hydrogen Evolution and CO ₂ Reduction on Gold Electrodes. <i>Journal of the American Chemical Society</i> , 2022, 144, 1589-1602.	13.7	127

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109	Promotion of the Oxidation of Carbon Monoxide at Stepped Platinum Single-Crystal Electrodes in Alkaline Media by Lithium and Beryllium Cations. <i>Journal of the American Chemical Society</i> , 2010, 132, 16127-16133.	13.7	124
110	The theory of electrochemical instabilities. <i>Electrochimica Acta</i> , 1992, 37, 1771-1778.	5.2	122
111	Instabilities and oscillations in simple models of electrocatalytic surface reactions. <i>Journal of Electroanalytical Chemistry</i> , 1994, 371, 149-159.	3.8	122
112	The effect of pH on the electrocatalytic oxidation of formic acid/formate on platinum: A mechanistic study by surface-enhanced infrared spectroscopy coupled with cyclic voltammetry. <i>Electrochimica Acta</i> , 2014, 129, 127-136.	5.2	122
113	Oxygen reduction and evolution at single-metal active sites: Comparison between functionalized graphitic materials and protoporphyrins. <i>Surface Science</i> , 2013, 607, 47-53.	1.9	121
114	Pseudo-Single-Crystal Electrochemistry on Polycrystalline Electrodes: Visualizing Activity at Grains and Grain Boundaries on Platinum for the Fe ²⁺ /Fe ³⁺ Redox Reaction. <i>Journal of the American Chemical Society</i> , 2013, 135, 3873-3880.	13.7	121
115	Stability study and categorization of electrochemical oscillators by impedance spectroscopy. <i>Journal of Electroanalytical Chemistry</i> , 1996, 409, 175-182.	3.8	120
116	Mechanistic study of the nitric oxide reduction on a polycrystalline platinum electrode. <i>Electrochimica Acta</i> , 2001, 46, 923-930.	5.2	120
117	Comparison of methanol, ethanol and iso-propanol oxidation on Pt and Pd electrodes in alkaline media studied by HPLC. <i>Electrochemistry Communications</i> , 2011, 13, 466-469.	4.7	119
118	Structure- and Coverage-Sensitive Mechanism of NO Reduction on Platinum Electrodes. <i>ACS Catalysis</i> , 2017, 7, 4660-4667.	11.2	118
119	Selective Catalytic Reduction at Quasi-Perfect Pt(100) Domains: A Universal Low-Temperature Pathway from Nitrite to N ₂ . <i>Journal of the American Chemical Society</i> , 2011, 133, 10928-10939.	13.7	117
120	Modeling the Oxygen Evolution Reaction on Metal Oxides: The Influence of Unrestricted DFT Calculations. <i>Journal of Physical Chemistry C</i> , 2014, 118, 4095-4102.	3.1	117
121	Selectivity Trends Between Oxygen Evolution and Chlorine Evolution on Iridium-Based Double Perovskites in Acidic Media. <i>ACS Catalysis</i> , 2019, 9, 8561-8574.	11.2	117
122	Bifurcations of mixed-mode oscillations in a three-variable autonomous Van der Pol-Duffing model with a cross-shaped phase diagram. <i>Physica D: Nonlinear Phenomena</i> , 1995, 80, 72-94.	2.8	116
123	Electrocatalytic Hydrogenation of 5-Hydroxymethylfurfural in Acidic Solution. <i>ChemSusChem</i> , 2015, 8, 1745-1751.	6.8	113
124	Oscillations and Complex Dynamical Bifurcations in Electrochemical Systems. <i>Advances in Chemical Physics</i> , 2007, , 161-298.	0.3	112
125	Spectroscopic Observation of a Hydrogenated CO Dimer Intermediate During CO Reduction on Cu(100) Electrodes. <i>Angewandte Chemie</i> , 2017, 129, 3675-3678.	2.0	112
126	Correlation of surface site formation to nanoisland growth in the electrochemical roughening of Pt(111). <i>Nature Materials</i> , 2018, 17, 277-282.	27.5	112

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127	Electrolyte Effects on CO ₂ Electrochemical Reduction to CO. <i>Accounts of Chemical Research</i> , 2022, 55, 1900-1911.	15.6	112
128	Field-Dependent Electrode \sim Chemisorbate Bonding: A Sensitivity of Vibrational Stark Effect and Binding Energetics to Nature of Surface Coordination. <i>Journal of the American Chemical Society</i> , 2002, 124, 2796-2805.	13.7	110
129	Adsorption of phosphate species on poly-oriented Pt and Pt(1 1 1) electrodes over a wide range of pH. <i>Electrochimica Acta</i> , 2010, 55, 7961-7968.	5.2	109
130	Electrocatalytic Hydrogenation of 5-Hydroxymethylfurfural in the Absence and Presence of Glucose. <i>ChemSusChem</i> , 2013, 6, 1659-1667.	6.8	109
131	Voltammetric Scanning Electrochemical Cell Microscopy: Dynamic Imaging of Hydrazine Electro-oxidation on Platinum Electrodes. <i>Analytical Chemistry</i> , 2015, 87, 5782-5789.	6.5	109
132	Iron-Based Perovskites for Catalyzing Oxygen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2018, 122, 8445-8454.	3.1	106
133	Electrocatalysis on bimetallic and alloy surfaces. <i>Surface Science</i> , 2004, 548, 1-3.	1.9	105
134	Electrochemical Reduction of NO by Hemin Adsorbed at Pyrolytic Graphite. <i>Journal of the American Chemical Society</i> , 2005, 127, 7579-7586.	13.7	103
135	Computational Comparison of Late Transition Metal (100) Surfaces for the Electrocatalytic Reduction of CO to C ₂ Species. <i>ACS Energy Letters</i> , 2018, 3, 1062-1067.	17.4	103
136	Electrochemical Hydrogen Production: Bridging Homogeneous and Heterogeneous Catalysis. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 3723-3725.	13.8	102
137	Glycerol electro-oxidation on bismuth-modified platinum single crystals. <i>Journal of Catalysis</i> , 2017, 346, 117-124.	6.2	102
138	Modeling the butterfly: the voltammetry of (â ³ 3R30)° and p(2-2) overlayers on (111) electrodes. <i>Journal of Electroanalytical Chemistry</i> , 2000, 485, 161-165.	3.8	100
139	pH dependence of the electroreduction of nitrate on Rh and Pt polycrystalline electrodes. <i>Chemical Communications</i> , 2014, 50, 2148-2151.	4.1	100
140	Oxidation of Formic Acid and Carbon Monoxide on Gold Electrodes Studied by Surface-Enhanced Raman Spectroscopy and DFT. <i>ChemPhysChem</i> , 2005, 6, 2597-2606.	2.1	99
141	A lattice-gas model for halide adsorption on single-crystal electrodes. <i>Journal of Electroanalytical Chemistry</i> , 1998, 450, 189-201.	3.8	98
142	Carbon Monoxide Oxidation on Pt Single Crystal Electrodes: Understanding the Catalysis for Low Temperature Fuel Cells. <i>ChemPhysChem</i> , 2011, 12, 2064-2072.	2.1	98
143	Theoretical design and experimental implementation of Ag/Au electrodes for the electrochemical reduction of nitrate. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 3196.	2.8	98
144	Electrolyte Effects on the Faradaic Efficiency of CO ₂ Reduction to CO on a Gold Electrode. <i>ACS Catalysis</i> , 2021, 11, 4936-4945.	11.2	97

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145	Theory of the transition from sequential to concerted electrochemical proton-electron transfer. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 1399-1407.	2.8	96
146	Electrochemical oscillators: their description through a mathematical model. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1991, 303, 73-94.	0.1	95
147	Structural principles to steer the selectivity of the electrocatalytic reduction of aliphatic ketones on platinum. <i>Nature Catalysis</i> , 2019, 2, 243-250.	34.4	95
148	Potential Oscillations and S-Shaped Polarization Curve in the Continuous Electro-oxidation of CO on Platinum Single-crystal Electrodes. <i>Journal of Physical Chemistry B</i> , 2001, 105, 8381-8386.	2.6	94
149	Effect of the Interfacial Water Structure on the Hydrogen Evolution Reaction on Pt(111) Modified with Different Nickel Hydroxide Coverages in Alkaline Media. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 613-623.	8.0	94
150	Cathodic Corrosion as a Facile and Effective Method To Prepare Clean Metal Alloy Nanoparticles. <i>Journal of the American Chemical Society</i> , 2011, 133, 17626-17629.	13.7	92
151	Ab initio studies of a water layer at transition metal surfaces. <i>Journal of Chemical Physics</i> , 2005, 122, 054701.	3.0	89
152	Density functional theory study of the oxidation of CO by OH on Au(110) and Pt(111) surfaces. <i>Physical Chemistry Chemical Physics</i> , 2004, 6, 4215.	2.8	88
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